

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

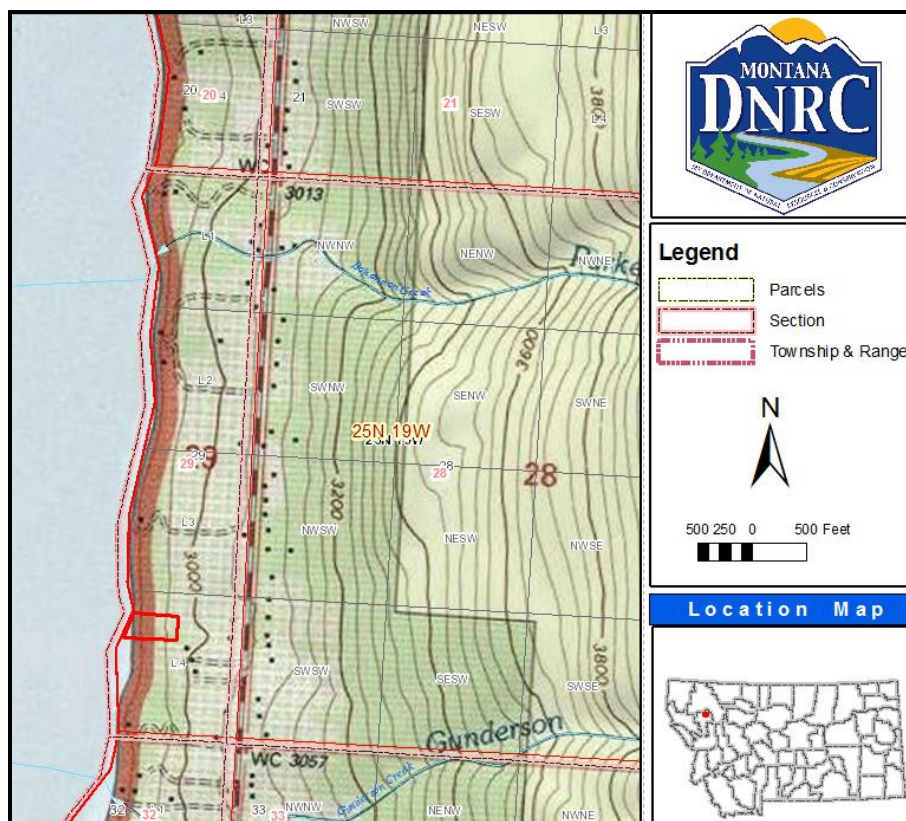
1. *Applicant/Contact name and address:*

Jerry E Manning and Ruth A Wrightsman
31922 Zavala Lane
Bigfork, MT 59911

2. *Type of action:* Application for Beneficial Water Use Permit 76LJ 30108766

3. *Water source name:* Flathead Lake

4. *Location affected by project:* The place of use is generally located in Lot 4 Tract A COS 4442, NWSESE Section 29, Township 25N, Range 19W, Flathead, MT. This place of use is located approximately 0.70 miles north of the Flathead Indian Reservation's most northern boundary.



5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The Applicant proposes to divert water from Flathead River (Flathead Lake), by means of a pump, from April 15th – October 15th at 25 GPM up to 2.65 AF, from a point in Lot 4 Tract A COS 4442, NWSESE Section 29, Township 25N, Range 19W, Flathead, MT to irrigate one acre of orchard April 15th through October 15th and 0.1 acres of lawn and garden. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. *Agencies consulted during preparation of the Environmental Assessment:*

(include agencies with overlapping jurisdiction)

- U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program
- Montana Department of Fish Wildlife & Parks (DFWP); Dewatered Stream Information
- Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
- U.S. Natural Resource Conservation Service (NRCS); web soil survey
- Montana Historical Society

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Flathead River and Flathead Lake are not listed by DFWP as chronically or periodically dewatered. Upon analysis by the Department Flathead River/Lake were found to have water in excess of that requested by the Applicant.

Determination: No impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information Center in 2016 the Flathead River was categorized as having insufficient data to assess any use. Flathead Lake fully supports drinking water, primary contact recreation, and agriculture. Aquatic life is not fully supported due to mercury, polychlorinated, nitrogen and phosphorus. The proposed diversion will not significantly reduce the total volume of water in the lake. The Department found that the proposed use will not affect water quality.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A, project does not involve groundwater.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to pump surface water from Flathead River (Flathead Lake) at 25 GPM via a submersible Franklin Electric 2 HP, 230 volt, 3 phase pump. A 1.25-inch transmission main connected to the pump conveys water approximately 200 feet up to the pressure tank. Two lines will leave the pressure tank; one will go to the orchard and the other to a frost free faucet associated with lawn/garden irrigation. The pressure tank will be set so that the orchard receives approximately 50 psi of pressure, enough pressure to run the orchard sprinklers. Only one irrigation zone is watered at a time. A pressure reducer will be used when supplying water to the lawn/garden irrigation system. A 1.25-inch main line will send water approximately 300 feet up to the orchard; electronically activate control valves send the water to one of three irrigation zones. Each zone has one line and multiple sprinklers (24-30 heads per line). The sprinklers will be Nelson R10 Rotator with P2 9° Red Plate with a Dark Green #50 nozzle. Each sprinkler is estimated to apply water at a rate of 0.51 GPM at 50 PSI. Zone 2 is the largest irrigation zone and will use approximately 15.3 GPM (30 sprinklers); lawn and garden irrigation could run simultaneously with the largest zone being irrigated. Pump specifications were included in the application. Based on the total dynamic head and pump curve associated with the pump; the system is capable of producing and distributing the requested flow rate and volume for irrigation (orchard) and lawn/garden irrigation. The Department found that no significant negative impact will occur to existing water users and surface water resources from the proposed project.

Determination: No impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program and DFWP website were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project.

According to the Montana Natural Heritage Program and DFWP in Township 25N, Range 19W there are two plant species of concern, Adder's Tongue (*Ophioglossum pusillum*) and Clustered Lady's-Slipper (*Cypripedium fasciculatum*). Both are found in northwestern Montana. Adder's

Tongue does not appear to be at risk from any human-caused impacts at this time. Clustered Lady's-slipper occurs mostly on national forest lands and any potential negative impacts are mainly related to timber harvesting. The proposed project will not impact either species.

The Canada Lynx (*Lynx Canadensis*) and the Grizzly Bear (*Ursus arctos*) are listed as threatened by USFWS. Bull Trout are identified as a species of concern in the Flathead drainage and are listed as threatened by USFWS. An adequate quantity of water will still exist in the Flathead Lake to maintain existing populations of Bull Trout. Development has existed on this section of lakeshore for sometime; any impacts to sensitive mammal species most likely has already occurred. The proposed project will not impact any threatened or endangered fish, wildlife, plants and aquatic species or any species of special concern.

Determination: No impact.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A, project does not involve wetlands or critical riparian habitats

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

According to soil survey data provided by the NRCS, soil within the place of use consists mostly of very gravelly loam and gravelly silt loam. Soils around Flathead Lake are not susceptible to saline seep. The use of water from Flathead Lake for irrigation will not cause degradation of soil quality and stability.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Any impacts to existing vegetation will be within the range of current disturbances due to current domestic uses associated with the property.

Determination: No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. The water will be diverted using an electric pump. No air pollutants were identified as resulting from the applicants proposed use of Flathead Lake water for irrigation.

Determination: No impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

The Montana Historical Society indicates no historical or archaeological sites are inventoried in the area. As long as there is no disturbance or alteration to structures over fifty years of age there is a low likelihood cultural properties will be impacted.

Determination: No impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

All impacts to land, water and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is located in an area with no locally adopted environmental plans.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

There should be no significant negative impact on human health from this proposed use.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there is any government regulatory impacts on private property rights.*

Yes___ No_x__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.*
- (b) Local and state tax base and tax revenues? None identified.*
- (c) Existing land uses? None identified.*
- (d) Quantity and distribution of employment? None identified.*
- (e) Distribution and density of population and housing? None identified.*
- (f) Demands for government services? None identified.*
- (g) Industrial and commercial activity? None identified.*
- (h) Utilities? None identified.*
- (i) Transportation? None identified.*
- (j) Safety? None identified.*
- (k) Other appropriate social and economic circumstances? None identified.*

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. *Describe any mitigation/stipulation measures:*

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

No reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternative: None identified.

2 Comments and Responses

4. Finding:

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Melissa Brickl

Title: Hydrologist/Water Resource Specialist

Date: November 4, 2016